### **LENET:**

Team Name - Outliers

**Team Number – 13** 

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# **Project objectives:**

• Build Lenet – 5 from scratch using basic libraries such as NumPy.

- Evaluate with inbuilt Lenet 5 model trained with libraries.
- Achieve an accuracy close to the paper's on MNSIT test set.

#### **Deliverables**:

- Preprocess MNSIT Dataset containing 60000 samples.
- Implementing hidden layers and forward pass.
- Implementing back-propagation from scratch.
- Visualizing and comparing the results on MNSIT data set.

## Timeline (Year 2021):

26 <sup>th</sup> Oct	Project Allocation
7 <sup>th</sup> Nov	Proposal Submission
8 <sup>th</sup> Nov – 11 <sup>th</sup> Nov	Paper and relevant work reading
12 <sup>th</sup> Nov – 17 <sup>th</sup> Nov	Implementing hidden layers and forward pass.
18 <sup>th</sup> Nov – 20 <sup>th</sup> Nov	Mid evaluation
21 <sup>st –</sup> 27 <sup>th</sup> Nov	Backpropagation implementation
27 <sup>th</sup> Nov – 3 <sup>rd</sup> Dec	Training, testing, Analysis and ppt preparation
4 <sup>th</sup> Dec	Final Evaluation

### References:

1. <a href="http://vision.stanford.edu/cs598\_spring07/papers/Lecun98.pdf">http://vision.stanford.edu/cs598\_spring07/papers/Lecun98.pdf</a>